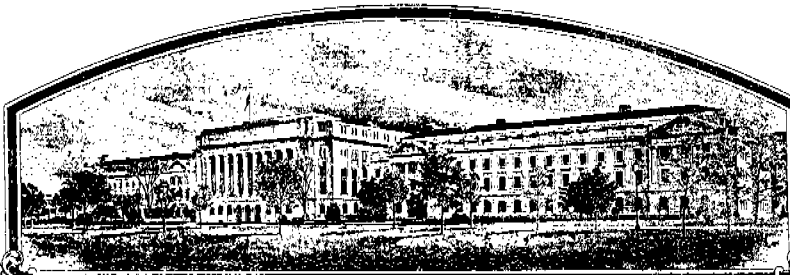


No.

7800031



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Ring Around Products, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (T. 1542, AS AMENDED, 7 U.S.C. 2131 ET SEQ.)

SOYBEAN

'RA-601'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 22nd day of June in
the year of our Lord one thousand nine
hundred and seventy-eight

Attest:

Edward K. Lee
Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Bob Dwyer
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY Cross I(a)73		1b. VARIETY NAME RA-601		FOR OFFICIAL USE ONLY PV NUMBER 7800031	
2. KIND NAME Soybeans		3. GENUS AND SPECIES NAME Glycine max		FILING DATE 3-13-78	TIME 8:00 A.M.
4. FAMILY NAME (BOTANICAL) Leguminosea		5. DATE OF DETERMINATION October, 1976		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 3-13-78 6-5-78
6. NAME OF APPLICANT(S) Ring Around Products, Inc. By Dr. William H. Davis ROHM AND HAAS SEEDS INC.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Box 589 Montgomery, Alabama 36101		8. TELEPHONE AREA CODE AND NUMBER 205-365-5971	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Delaware		11. DATE OF INCORPORATION June 3, 1969	

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: **DR. JAMES E. STROIKE, 727 NORRISTOWN ROAD, SPRING HOUSE, PA 19477**
~~Dr. William H. Davis, Director of Soybean Research, Ring Around Products, Inc.~~
~~P.O. Box 1629, Plainview, TX 79072~~

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:
- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☒ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

March 20, 1978
(DATE)

William H. Davis
(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

EXHIBIT A

7800031

A bulk population of Mack x L62-1251 (L62-1251 is a dt₂ backcross to Clark) was obtained from Dr. C. F. Caviness, University of Arkansas, Department of Agronomy, 1973.

A single plant selected and designated as Cross I(a)73 was evaluated as follows:

	<u>1973 Selection</u>	<u>Grams/Plant</u>
Cross ^{R/S} Cross I(a)73		40 grams

~~Cross~~ ^{R/S} I(a)73 was increased in Puerto Rico during the winter of 1973-74. Seed from this line was tested at three locations in 1974.

	<u>1974 Wt./ Plot</u>		
<u>Variety</u>	<u>Texas</u>	<u>Arkansas</u>	<u>North Carolina</u>
Cross I(a)73	34 lbs.	28 lbs.	35 lbs.
York	54 lbs.	--	--
Forrest	--	24 lbs.	--
Essex	--	--	34 lbs.

During 1975 this line was tested at four locations. Due to adverse weather conditions, only two locations were harvested.

	<u>1975 Yield</u>	
<u>Variety</u>	<u>Plainview, Texas</u>	<u>Fisher, Arkansas</u>
Cross I(a)73	30 lbs.	49 lbs.
Forrest	Dead Due to High PH	51 lbs.

The Arkansas plot has a high incidence of race 3 cyst nematode present. Plots were 4 rows X 100' = 40" wide rows in Texas and 30" wide in Arkansas.

Plains, Georgia	Commercial field planted after wheat (July Planting)	
	Bragg	43 Bu./A
	Cross I(a)73	42 Bu./A

This seed was harvested and was used to provide the breeders seed grown at Plainview, Texas. A total of 111 acres is on increase. It will be rogued for mixtures. RA-601 is a very phenotypically uniform variety.

Purity growouts of RA-601 indicates that this variety will have a few dt₂ and dt₁ plants; ca 3 dt₁ and 2 dt₂ per thousand.

Tan pods occur among the normal brown pods at approximately 6 per thousand. This may be due to some plant mixture from a sister line.

Seed will have normally a black hilum. However, upon occasion a faint brown background may appear under certain environmental conditions. Brown hilum seed may occur at a rare frequency of 1:1000.

EXHIBIT BMature Plant Characteristics:

<u>Variety</u>	<u>Mat.</u>	<u>Color</u>				<u>Plant Height*</u>	<u>Plant Type</u>
		<u>Hila</u>	<u>Pod</u>	<u>Pub.</u>	<u>Flower</u>		
RA-601	6	Black	Tan	Brown	Purple	48"	Indeterminate
Mack	5	Black	Tan	Brown	Purple	32"	dt ₁

*Arkansas data, 1975

EXHIBIT B

RA-601 most closely resembles its maternal parent Mack. It is unique from this variety in the following characteristics.

- 1) RA-601 is much taller - 48" vs 32" for Mack at maturity.
- 2) RA-601 is indeterminate in plant type, Mack is determinate.
- 3) RA-601 is later in maturity than Mack, approximately 8 days.

EXHIBIT E

The applicant is the actual breeders. Ownership rights are to be held by Ring Around Products, Inc.

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Ring Around Products, Inc. (By Dr. William H. Davis)

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)

P.O. Box 589

Montgomery, Alabama 36101

FOR OFFICIAL USE ONLY

PVPO NUMBER

7800031

VARIETY NAME OR TEMPORARY
DESIGNATION

RA-601

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. SEED SHAPE:

1 = SPHERICAL

2 = SPHERICAL
FLATTENED

3 = ELONGATE

4 = OTHER (Specify)

2. SEED COAT COLOR:

1 = YELLOW

2 = GREEN

3 = BROWN

4 = BLACK

5 = OTHER (Specify)

SHADE:

1 = LIGHT

2 = MEDIUM

3 = DARK

3. SEED COAT LUSTER:

1 = DULL

2 = SHINY

4. SEED SIZE

GRAMS PER 100 SEEDS

5. HILUM COLOR:

1 = BUFF

2 = YELLOW

3 = BROWN

4 = GRAY

5 = IMPERFECT
BLACK

6 = BLACK 7 = OTHER (Specify)

SHADE:

1 = LIGHT

2 = MEDIUM

3 = DARK

6. COTYLEDON COLOR:

1 = YELLOW

2 = GREEN

7. LEAFLET SIZE (See Reverse):

1 = SMALL

2 = MEDIUM

3 = LARGE

8. LEAFLET SHAPE:

1 = OVATE

2 = OBLONG

3 = LANCEOLATE

4 = ELLIPTICAL

5 = OTHER (Specify)

9. LEAF COLOR (See reverse):

1 = LIGHT GREEN

2 = MEDIUM GREEN

3 = DARK GREEN

10. FLOWER COLOR:

1 = WHITE

2 = PURPLE

3 = OTHER (Specify)

11. POD COLOR:

1 = TAN

2 = BROWN

3 = BLACK

12. POD SET:

1 = SCATTERED

2 = CONCENTRATED

13. PLANT PUBESCENCE COLOR:

1 = GRAY

2 = BROWN

3 = OTHER (Specify)

SHADE:

1 = LIGHT

2 = MEDIUM

3 = DARK

14. PLANT TYPES (See Reverse):

1 = SLENDER

2 = BUSHY

3 = INTERMEDIATE

15. PLANT HABIT:

1 = DETERMINATE

2 = INDETERMINATE

3 = OTHER (Specify)

16. HYPOCOTYL COLOR:

1 = GREEN

2 = PURPLE

17. SEED PROTEIN:

1 = A

2 = B

18. NUMBER OF DAYS TO FLOWERING

(Place a zero in first box (e.g., 0 [9]) when days are 9 or less.)

19. MATURITY GROUP:

1 = 00

2 = 0

3 = I

4 = II

5 = III

6 = IV

7 = V

8 = VI

9 = VII

10 = VIII

20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C. (Place a zero in first box (e.g., 0 [2]) when size is 9 mm. or less.)

MM. LENGTH
OF SEEDLINGMM. LENGTH
OF COTYLEDONMM. WIDTH
OF COTYLEDON

21. DISEASE: (Enter 0 Not Tested; 1 Susceptible; 2 - Resistant)

BACTERIAL
PUSTULESOYBEAN
CYSTDOWNY
MILDEWPURPLE
STAINPOD AND
STEM BLIGHTROOT
KNOT

FROGEYE

STEM
CANKERPHYTO-
PHTHORABROWN
STEM ROTTARGET
SPOTBROWN
SPOTBUD
BLIGHT

WILDFIRE

RHIZOCTONIA
ROT

OTHER (Specify)

FORM GR-470-2 (REVERSE)

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Clark 63	Petiole angle	Clark 63
Leaf shape	" "	Seed size	" "
Leaf color	" "	Seed shape	" "
Leaf surface	Mack	Seedling pigmentation	Mack

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
Submitted	146	1.5	48"	--	--	38.2	22.9%	--	--
Name of similar variety									
Mack	138	2.0	34"	--	--	39.0	20.5%	--	--
Ark. Trials									

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"

ASSIGNMENTPLANT VARIETY PROTECTION CERTIFICATE

WHEREAS, Ring Around Products, Inc., a Delaware corporation, having a place of business at 12200 Ford Road, Suite 400, Dallas, Texas 75234, hereinafter referred to as "Ring Around", is the duly authorized owner and holder of the entire right, title and interest in and to the following U.S. Plant Variety Protection Certificates and applications for U.S. Plant Variety Certificates (collectively referred to as "Certificates"):

Plant Protection Certificates and Applications

<u>Variety</u>	<u>PVP Certificate No.</u>	<u>Date Issued</u>
Mitchell	7300054	10/30/74
RA-526	7500067	12/12/75
RA-501A	76TQ006	5/11/78
RA-401	7800030	6/22/78
RA-601	<u>7800031</u>	6/22/78
RA-480	7900007	2/15/79
RA-604	7900008	3/1/79
Mitchell 450	7900046	6/14/79
RA-402	8000093	7/31/80
RA-481	8000054	3/26/81
RA-680	8100097	4/15/82
RA-502	8200160	8/31/83
RA-403	8200163	10/27/83
Mitchell 410	8200162	10/27/83
RA-606	8200161	10/27/83
RA-580	8300075	4/30/84
RA-405	8500010 (filing number)	10/10/84 (filing date)
RA-451	8500008 (filing number)	10/10/84 (filing date)
RA-452	8500009 (filing number)	10/10/84 (filing date)

WHEREAS, ROHM AND HAAS SEEDS INC., a Delaware corporation, ("RHS") having a place of business at Independence Mall West, Philadelphia, Pennsylvania 19105, is desirous of acquiring the entire interest in the aforementioned varieties, Certificates and the rights associated therewith;

NOW, THEREFORE, in consideration of and in exchange for the sum of one dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, Ring Around does hereby sell, assign, transfer and set over, unto RHS its entire right, title and interest in and to the aforementioned varieties and Certificates.

ASSIGNMENT

WHEREAS, Rohm and Haas Seeds Inc., a Delaware corporation, with its principal office at Independence Mall West, Philadelphia, Pennsylvania 19105 ("RHS") is the owner of the entire right, title and interest in and to the following soybean varieties, applications for United States Plant Variety Protection Certificates and United States Plant Variety Protection Certificates (collectively referred to as "Certificates"):

<u>Soybean Variety</u>	<u>Certificate Number</u>	<u>Date Issued</u>
Mitchell	7300054	October 30, 1974
RA-401	7800030	June 22, 1978
RA-601	7800031	June 22, 1978
Mitchell 450	7900046	June 14, 1979
RA-481	8000054	March 26, 1981
RA-402	8000093	July 31, 1980
Mitchell 410	8200162	October 27, 1983
RA-403	8200163	October 27, 1983
RA-526	7500067	December 12, 1975
RA-604	7900008	March 1, 1979
RA-680	8100097	April 15, 1982
RA-502	8200160	August 31, 1983
RA-606	8200161	October 27, 1983
RA-580	8300075	April 30, 1984
RA-501 A	76TQ006	May 11, 1978
RA-480	7900007	February 15, 1979

<u>Soybean Variety</u>	<u>Application Number</u>	<u>Filing Date</u>
RA-451	8500008	October 10, 1984
RA-452	8500009	October 10, 1984
RA-405	8500010	October 10, 1984

WHEREAS, CR Seeds, a general partnership, having its principal office at 900 Darlington Highway, Hartsville, South Carolina 29550 ("Partnership") is desirous of acquiring the entire interest in the aforementioned varieties and Certificates;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RHS does hereby sell, assign, transfer to the Partnership the entire right, title and interest in and to the varieties and Certificates for its use and benefit and for its successors and assigns.

IN TESTIMONY THEREOF, Rohm and Haas Seeds Inc. intending to be legally bound has caused this assignment to be executed by its duly authorized officer, effective as of the 20th day of December, 1984.

Date:

12/23/85

ROHM AND HAAS SEEDS INC.

By:

Title:

Pres

STATE OF

Penna

:

SS

COUNTY OF

Phila

:

On this 23 day of December, 1985, before me appeared Charles H. Baker of Rohm and Haas Seeds Inc., the person who signed this instrument, who acknowledged that he signed it as a free act on behalf of Rohm and Haas Seeds Inc with authority to do so.

JOAN B. HENDERSON

Notary Public, Phila., Phila. Co.

My Commission Expires Nov. 29, 1986

My Commission Expires:

receipt and sufficiency of which are hereby acknowledged, CR Seeds does hereby sell, assign and transfer to RHS a one-half undivided interest in and to the varieties and Certificates and to CPS a one-half undivided interest in and to the varieties and Certificates for each of their use and benefit and for each of their successors and assigns.

IN TESTIMONY THEREOF, CR Seeds intending to be legally bound has caused this assignment to be executed by its duly authorized officer.

CR Seeds

By:

E. Joe Dahmer
President

State of

South Carolina

)SS

County of

Darlington

On this 30th day of December, 1986, before me appeared E. Joe Dahmer of CR Seeds, the person who signed this instrument who acknowledged that he signed it as a free act on behalf of CR Seeds with authority to do so.

Joan B. Henderson
Notary Public

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RRS does hereby sell, assign, transfer to the Partnership the entire right, title and interest in and to the varieties and Certificates for its use and benefit and for its successors and assigns.

IN TESTIMONY THEREOF, Rohm and Haas Seeds Inc. intending to be legally bound has caused this assignment to be executed by its duly authorized officer, effective as of the 20th day of December, 1984.

Date:

12/23/85

ROHM AND HAAS SEEDS INC.

By:

Charles H. Baker

Title:

PRES

STATE OF

Penna

:

COUNTY OF

Phila

:

SS

On this 23 day of December, 1985, before me appeared Charles H. Baker of Rohm and Haas Seeds Inc., the person who signed this instrument, who acknowledged that he signed it as a free act on behalf of Rohm and Haas Seeds Inc with authority to do so.

JOAN B. HENDERSON

Notary Public, Phila., Phila. Co.

My Commission Expires Nov. 29, 1986

My Commission Expires: _____

Joan B. Henderson
Notary Public

ASSIGNMENT

WHEREAS, CR Seeds, a general partnership having its principal office at 900 Darlington Highway, Hartsville, South Carolina 29550 ("Partnership"), is the owner of the entire right, title and interest to the United States Plant Variety Protection Certificates and applications for such Certificates (collectively "Certificates") listed on Appendix A attached hereto;

WHEREAS, the partners of CR Seeds, Rohm and Haas Seeds Inc., a Delaware corporation having its principal office at Independence Mall West, Philadelphia, PA 19105 ("RHS") and Coker's Pedigreed Seed Company, a South Carolina corporation with its principal office at 900 Darlington Highway, Hartsville, SC 29550 ("CPS"), are each desirous of acquiring a one-half undivided interest in the varieties and Certificates listed on Appendix A;

NOW, THEREFOR, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, CR Seeds does hereby sell, assign and transfer to RHS a one-half undivided interest in and to the varieties and Certificates and to CPS a one-half undivided interest in and to the varieties and Certificates for each of their use and benefit and for each of their successors and assigns.

IN TESTIMONY THEREOF, CR Seeds intending to be legally bound has caused this assignment to be executed by its duly authorized officer.

CR Seeds

By: E. Joe Dahmer
President

State of South Carolina)
County of Darlington) SS

On this 30th day of December, 1986, before me appeared E. Joe Dahmer of CR Seeds, the person who signed this instrument who acknowledged that he signed it as a free act on behalf of CR Seeds with authority to do so.

Logan B. Ellett
Notary Public

My commission expires 4-14-91

APPENDIX A

Soft Red Winter Wheat Varieties

<u>Variety Name</u>	<u>U.S. Plant Variety Certificate No.</u>	<u>Issue Date</u>
Coker 68-15	7200014	Mar. 6, 1974
Coker 68-19	7200015	Mar. 6, 1974
Coker 747	76TQ015	Sept. 9, 1978
Coker 762	8000152	Dec. 12, 1981
Coker 797	8000145	Dec. 12, 1981
Coker 916	8300036	Sept. 27, 1985
Coker 983	8400058 ¹	Feb. 27, 1984 ¹
McNair 701	7200038	Feb. 26, 1974
McNair 4823	7200037	April 8, 1975
RHS 8232	8400136 ¹	July 16, 1984 ¹
9227	8600009 ¹	Oct. 22, 1985 ¹
9323	8600010 ¹	Oct. 22, 1985 ¹

1. Application number and filing date.

Winter Oat Varieties

<u>Variety Name</u>	<u>U.S. Plant Variety Certificate No.</u>	<u>Issue Date</u>
Coker 227	7500007	Oct. 20, 1977
Coker 716	7900003	Dec. 28, 1978
Coker 820	8400059 ¹	Feb. 28, 1984 ¹
Coker 234	7500008	Oct. 26, 1977
Four Twenty Two	7700085	Apr. 12, 1979
Big Mac	8200121	Aug. 19, 1982
Mesquite	8200122	Aug. 19, 1982

1. Application number and filing date.

Soybean Varieties

Coker Hampton 266A	7100022	Sept. 6, 1973
Coker 136	7300091	Oct. 18, 1973
Coker 338	7400058	Oct. 29, 1976
Coker 237	7800034	July 13, 1978
Coker 488	7800035	July 13, 1978
Coker 156	7900043	Nov. 27, 1979
Coker 317	8100095	Nov. 19, 1981
Coker 368	8200140	Aug. 31, 1983
Coker 425	8400077	May 31, 1985
Coker 485	8400078	May 31, 1985
Coker 393 (Q327-4270)	8400018	Jan. 25, 1985
Coker 355 (XP5878)	8400019	Jan. 25, 1985
Coker 627	8700001 ¹	Oct. 3, 1986 ¹
Coker 686	Pending ¹	Dec. 19, 1986

1. Application number and filing date.

<u>Variety Name</u>	<u>U.S. Plant Variety Certificate No.</u>	<u>Issue Date</u>
AP55	8100089	Feb. 18, 1982
AP70	7800081	Feb. 15, 1979
AP71	8100090	Sept. 24, 1981
Lancer	7600044	Sept. 29, 1976
RA-526	7500067	Dec. 12, 1975
RA-604	7900008	Mar. 1, 1975
RA-680	8100097	Apr. 15, 1982
RA-502	8200160	Aug. 31, 1983
RA-606	8200161	Oct. 27, 1983
RA-580	8300075	Apr. 30, 1984
Mitchell	7300054	Oct. 30, 1974
RA-401	7800030	June 22, 1978
RA-601	7800031	June 22, 1978
Mitchell 450	7900046	June 14, 1979
RA-481	8000054	Mar. 26, 1981
RA-402	8000093	July 31, 1981
Mitchell 410	8200162	Oct. 27, 1983
RA-403	8200163	Oct. 27, 1983

<u>Variety Name</u>	<u>Certificate No.</u>	<u>Issue Date</u>
RA-451	8500008 ¹	Oct. 10, 1984 ¹
RA-452	8500009 ¹	Oct. 10, 1984 ¹
RA-405	8500010 ¹	Oct. 10, 1984 ¹
RA-501 A	76TQ006	May 11, 1978
RA-480	7900007	Feb. 15, 1979

1. Application number and filing date.

ASSIGNMENT

WHEREAS, Rohm and Haas Seeds Inc., a Delaware corporation having its principal office at Independence Mall West, Philadelphia, PA 19105 ("RHS"), is the owner of a one-half undivided interest in and to the United States Plant Variety Protection Certificates and applications for such Certificates (collectively "Certificates") listed on Appendix A attached hereto:

WHEREAS, Coker's Pedigreed Seed Company, a South Carolina corporation with its principal office at 900 Darlington Highway, Hartsville, SC 29550 ("CPS"), is desirous of acquiring this one-half undivided interest in the aforementioned varieties and Certificates;

NOW, THEREFOR, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RHS does hereby sell, assign and transfer to CPS RHS's one-half undivided interest in and to the varieties and Certificates for CPS's use and benefit and for its successors and assigns.

IN TESTIMONY THEREOF, RHS intending to be legally bound has caused this assignment to be executed by its duly authorized officer.

ROHM AND HAAS SEEDS INC.

By: Howard A. Mergelkamp
Assistant Treasurer

State of Pennsylvania)
County of Philadelphia) SS

On this 31st day of December, 1986, before me appeared Howard A. Mergelkamp of Rohm and Haas Seeds Inc., the person who signed this instrument who acknowledged that he signed it as a free act on behalf of Rohm and Haas Seeds Inc. with authority to do so.

Elizabeth A. Smith
Notary Public

Elizabeth A. Smith
Notary Public, Phila. Co.
My Commission Expires Oct. 14, 1989

My commission expires _____.

ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES

WHEREAS, COKER'S PEDIGREED SEED COMPANY, a South Carolina corporation ("Coker's"), having its offices at 900 Darlington Highway, Hartsville, South Carolina 29550, has adopted and used and is the sole and exclusive owner of certain United States Plant Variety Protection Certificates and similar rights under laws of countries other than the United States as listed in Exhibit A hereto:

WHEREAS, COKER'S PEDIGREED SEED CO. and NORTHRUP KING CO., a Delaware corporation ("NK"), have entered into an Asset Purchase Agreement, dated July 20, 1988, providing for the purchase and sale of substantially all of the assets and business of Coker's and the assumption of certain of Coker's liabilities and obligations by NK; and

WHEREAS, NK desires to acquire the right, title and interest in, to and under the Plant Variety Protection Certificates listed on Exhibit A hereto and the pending applications hereto (collectively, the "Plant Variety Protection Certificates").

2

Soybean Varieties, Continued

<u>Variety Name</u>	<u>U.S. Plant Variety Certificate Number</u>	<u>Issue Date</u>	<u>Term (Yrs.)</u>
AP55	8100089	Feb. 18, 1982	18
AP70	7800081	Feb. 15, 1979	17
AP71	8100090	Sept. 24, 1981	18
Lancer	7600044	Sept. 29, 1976	17
RA-526	7500067	Dec. 12, 1975	17
RA-604	7900008	Mar. 1, 1975	17
RA-680	8100097	Apr. 15, 1982	18
RA-502	8200160	Aug. 31, 1983	18
RA-606	8200161	Oct. 27, 1983	18
RA-580	8300075	Apr. 30, 1984	18
Mitchell	7300054	Oct. 30, 1974	17
Ra-401	7800030	June 22, 1978	17
RA-601	7800031	June 22, 1978	17
Mitchell 450	7900046	June 14, 1979	17
RA-481	8000054	Mar. 26, 1981	18
RA-402	8000093	July 31, 1980	17
Mitchell 410	8200162	Oct. 27, 1983	18
RA-403	8200163	Oct. 27, 1983	18
RA-451	8500008	Dec. 27, 1985	18
RA-452	8500009	Aug. 30, 1985	18
RA-405	8500010	Aug. 30, 1985	18
RA-501A	76T0006	May 11, 1978	17
RA-480	7900007	Feb. 15, 1979	17

ASSIGNMENTPLANT VARIETY PROTECTION CERTIFICATE

WHEREAS, Ring Around Products, Inc., a Delaware corporation, having a place of business at 12200 Ford Road, Suite 400, Dallas, Texas 75234, hereinafter referred to as "Ring Around", is the duly authorized owner and holder of the entire right, title and interest in and to the following U.S. Plant Variety Protection Certificates and applications for U.S. Plant Variety Certificates (collectively referred to as "Certificates"):

Plant Protection Certificates and Applications

<u>Variety</u>	<u>PVP Certificate No.</u>	<u>Date Issued</u>
Mitchell	7300054	10/30/74
RA-526	7500067	12/12/75
RA-501A	76TQ006	5/11/78
RA-401	7800030	6/22/78
RA-601	<u>7800031</u>	6/22/78
RA-480	7900007	2/15/79
RA-604	7900008	3/1/79
Mitchell 450	7900046	6/14/79
RA-402	8000093	7/31/80
RA-481	8000054	3/26/81
RA-680	8100097	4/15/82
RA-502	8200160	8/31/83
RA-403	8200163	10/27/83
Mitchell 410	8200162	10/27/83
RA-606	8200161	10/27/83
RA-580	8300075	4/30/84
RA-405	8500010 (filing number)	10/10/84 (filing date)
RA-451	8500008 (filing number)	10/10/84 (filing date)
RA-452	8500009 (filing number)	10/10/84 (filing date)

WHEREAS, ROHM AND HAAS SEEDS INC., a Delaware corporation, ("RHS") having a place of business at Independence Mall West, Philadelphia, Pennsylvania 19105, is desirous of acquiring the entire interest in the aforementioned varieties, Certificates and the rights associated therewith;

NOW, THEREFORE, in consideration of and in exchange for the sum of one dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged, Ring Around does hereby sell, assign, transfer and set over, unto RHS its entire right, title and interest in and to the aforementioned varieties and Certificates.

IN WITNESS WHEREOF, this ASSIGNMENT is entered into as of this 21st day of November, 1984.

RING AROUND PRODUCTS, INC.

By

Wilbur G. Johnson
President

ACKNOWLEDGMENT

STATE OF PENNSYLVANIA)
COUNTY OF PHILADELPHIA)

On November 21, 1984, before me, the undersigned, a Notary Public in and for said State and County, personally appeared Wilbur G. Johnson, known to me to be the President of the Corporation that executed the within instrument, on behalf of the corporation herein named, and acknowledged to me that such Corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

WITNESS my hand and official seal.

Elizabeth A. Smith
Notary Public

My Commission Expires: Oct. 14, 1985

ELIZABETH A. SMITH
Notary Public Phila., Phila. Co.
My Commission Expires Oct. 14, 1985